Glossary of Standard Terms

Term (Acronym)	Definition	Reference
accuracy	Accuracy in wetland mapping is a measure of both errors of omission and commission.	FGDC Wetlands Subcommittee. 2009.
acid	Term applied to water with a pH less than 5.5.	Cowardin et al, 1979
alkaline	Term applied to water with a pH greater than 7.4.	Cowardin et al, 1979
attribute code	For wetland mapping, the attribute codes for wetland and deepwater polygons are from the Cowardin Wetlands Classification Standard. All polygons must have a valid attribute code to depict mapped habitat type.	FGDC Wetlands Subcommittee. 2009.
bar	An elongated landform generated by waves and currents, usually running parallel to the shore, composed predominantly of unconsolidated sand, gravel, stones, cobbles, or rubble and with water on two sides.	Cowardin et al, 1979
base imagery	The ortho-rectified imagery (aerial photography/satellite imagery) that is used as the base image (map) to overlay wetlands data. Digital Orthophoto Quarter Quads (DOQQs) at 1:12,000 scale are currently the most widely-used base imagery.	FGDC Wetlands Subcommittee. 2009.
beach	A sloping landform on the shore of larger water bodies, generated by waves and currents and extending from the water to a distinct break in landform or substrate type (e.g., a foredune, cliff, or bank).	Cowardin et al, 1979
benthic	Adjective from benthos, the biogeographic region that includes the bottom of a lake, sea, or ocean, and the littoral and supralittoral zones of the shore.	Dictionary.com
boulder	Rock fragments larger than 60.4 cm (24 inches) in diameter.	Cowardin et al, 1979
brackish	Marine and Estuarine waters with Mixohaline salinity. The term should not be applied to inland waters.	Cowardin et al, 1979
broad-leaved deciduous	Woody angiosperms (trees or shrubs) with relatively wide, flat leaves that are shed during the cold or dry season; e.g., black ash (*Frazinus nigra*).	Cowardin et al, 1979

broad-leaved evergreen	Woody angiosperms (trees or shrubs) with relatively wide, flat leaves that generally remain green and are usually persistent for a year or more; e.g., red mangrove (*Rhizophora mangle*).	Cowardin et al, 1979
calcareous	Formed of calcium carbonate or magnesium carbonate by biological deposition or inorganic precipitation in sufficient quantities to effervesce carbon dioxide visibly when treated with cold 0.1 normal hydrochloric acid. Calcareous sands are usually formed of a mixture of fragments of mollusk shell, echinoderm spines and skeletal material, coral, foraminifera, and algal platelets (e.g., Halimeda).	Cowardin et al, 1979
channel	An open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water (Langbein and Iseri 1960:5).	Cowardin et al, 1979
channel bank	The sloping land bordering a channel. The bank has steeper slope than the bottom of the channel and is usually steeper than the land surrounding the channel.	Cowardin et al, 1979
Clean Water Act	Under State best management practices program, (2) authorized to be appropriated to the Secretary of the Interior $6,000,000 to complete the National Wetlands Inventory of the United States, by December 31, 1981, and to provide information from such Inventory to States as it becomes available to assist such States in the development and operation of programs under this chapter.	Title 33, Ch. 26, Subchapter II (h)i.
circumneutral	Term applied to water with a pH of 5.5 to 7.4.	Cowardin et al, 1979
cobbles	Rock fragments 7.6 cm (3 inches) to 25.4 cm (10 inches) in diameter.	Cowardin et al, 1979
codominant	Two or more species providing about equal areal cover which in combination control the environment.	Cowardin et al, 1979

commission error	Commission errors are errors related to misclassification or limits of scale. For wetland mapping, commission errors include: 1) misclassification (e.g., nonwetland areas mapped as wetlands or misidentification of the wetland type), 2) small uplands included within a large wetland mapping unit, and 3) small wetlands of different type included within a larger wetland unit of another type (e.g., a small scrub-shrub wetland within a palustrine forested wetland mapping unit) simply because they are too small to map (below the target mapping unit). The latter two situations are commonly referred to as "inclusions." Habitat changes that have occurred between the date of the base imagery and date of field observation/groundtruthing are not considered errors as the wetland was correctly classified on the base imagery.	FGDC Wetlands Subcommittee. 2009.
Coastal Barrier Resources Act (CBRA)	CBRA restricts most Federal expenditures and financial assistance that tend to encourage development, including Federal flood insurance, in the John H. Chafee Coastal Barrier Resource System. Three important goals of CBRA are to: minimize loss of human life by discouraging development in high risk areas; reduce wasteful expenditure of Federal resources; and protect the natural resources associated with coastal barriers.	FWS/CBRA website. http://www.fws.gov/habitatconservation/cbra4.html
Cowardin classification system	The U.S. Fish and Wildlife Service's official wetlands and deepwater habitat classification system written by Cowardin, Carter, Golet, and LaRoe and published in 1979, endorsed by the FGDC as Classification of Wetlands and Deepwater Habitats of the United States, FGDC-STD-004 in 1996.	FGDC Wetlands Subcommittee. 2009.
datum	North American Datum 1983 (NAD83): Because Earth deviates significantly from a perfect ellipsoid, the ellipsoid that best approximates its shape varies region by region across the world. Clarke 1866, and North American Datum of 1927 with it, were surveyed to best suit North America as a whole. As it became feasible to acquire information referring to a single global ellipsoid, the GRS 80 ellipsoid was developed for best approximating the earth as a whole, and it became the foundation for the North American Datum of 1983.	Wikipedia December 2010
deciduous stand	A plant community where deciduous trees or shrubs represent more than 50% of the total areal coverage of trees or shrubs.	Cowardin et al, 1979

deepwater habitats/ deepwaters	Deepwater habitats are permanently flooded lands lying below the deepwater boundary of wetlands. Deepwater habitats include environments where surface water is permanent and often deep, so that water, rather than air, is the principal medium within which the dominant organisms live, whether or not they are attached to the substrate. As in wetlands, the dominant plants are hydrophytes; however, the substrates are considered nonsoil because the water is too deep to support emergent vegetation. (U.S . Soil Conservation Service, Soil Survey Staff 1975)	Cowardin et al, 1979
digital elevation model (DEM)	A digital elevation model (DEM) is a digital representation of ground surface topography or terrain. Techniques for generating digital elevation models include interferometric synthetic aperture radar or stereoscopic pairs using the digital image correlation method.	Wikipedia December 2010
digital orthophoto quads (DOQs) or quarter quads (DOQQs)	A digital orthophoto quadrangle (DOQ) is a computer-generated image of an aerial photograph. It has been orthorectified--altered so that it has the geometric properties of a map; DOQ's in fact meet National Map Accuracy Standards. Thus the user can measure distances accurately on a DOQ. The standard DOQ from the U.S. Geological Survey is a black-and-white (gray-scale) or color-infrared image covering 3.75 minutes of latitude by 3.75 minutes of longitude. Thus, four such photos can be combined, or mosaicked, to cover the area represented by a standard USGS 7.5-minute, 1:24,000-scale topographic map. Mosaicking is facilitated by the fact that the images overlap. The DOQ's are referenced to the North American Datum of 1983 and use the Universal Transverse Mercator projection. Their resolution is such that each pixel represents a square meter.	USGS Terraserver website. December 2010
dominant	The species controlling the environment.	Cowardin et al, 1979
dormant season	That portion of the year when frosts occur (see U.S. Department of Interior, National Atlas 1970:110-111 for generalized regional delineation).	Cowardin et al, 1979
edge-matching	In wetland mapping, there are two types of edge-matching: internal ties along the borders of source images, and external ties to preexisting wetland data immediately adjacent to the project area. Edge-matching of wetland interpretation is required for a seamless wetlands database.	FGDC Wetlands Subcommittee. 2009.

Emergency Wetlands Resources Act (EWRA)	Approved November 10, 1986, required the Secretary to report to Congress on wetlands loss, including an analysis of the role of Federal programs and policies in inducing such losses. In addition, as amended in the Wild Bird Act of 1992, it directed the Secretary, through the Service, to complete by September 30, 1998, mapping of the contiguous United States; produce, by September 30, 2000, National Wetlands Inventory maps for Alaska and other noncontiguous portions of the U.S.; produce, by September 30, 2004, a digital wetlands database for the U.S. based on the final wetland maps produced under this section; archive and make available for dissemination wetlands data and maps digitized under this section as such data and maps become available; and to produce, by September 30, 1990, and at ten-year intervals thereafter, reports to update and improve in the September 1982 "Status and Trends of Wetlands and Deepwater Habitat in the Coterminous United States, 1950's to 1970's."	Public Law 99-645 (100 Stat. 3582)
emergent hydrophytes	Erect, rooted, herbaceous angiosperms that may be temporarily to permanently flooded at the base but do not tolerate prolonged inundation of the entire plant; e.g., bulrushes (*Scirpus* spp.), saltmarsh cordgrass.	Cowardin et al, 1979
emergent mosses	Mosses occurring in wetlands, but generally not covered by water.	Cowardin et al, 1979
Estuarine	The Estuarine System consists of deepwater tidal habitats and adjacent tidal wetlands that are usually semi-enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines there is appreciable dilution of sea water. Offshore areas with typical estuarine plants and animals, such as red mangroves (Rhizophora mangle) and eastern oysters (Crassostrea virginica), are also included in the Estuarine System.	Cowardin et al, 1979
estuarine and lacustrine deepwater	Subtidal waters below the extreme spring low tide mark in estuaries and tidal freshwater lakes and nontidal waters of lakes deeper than 2 m at annual low water; "deepwater" excludes the shallow water zone of lakes (lacustrine littoral wetlands).	FGDC Wetlands Subcommittee. 2009.
eutrophic lake	Lake that has a high concentration of plant nutrients such as nitrogen and phosphorus.	Cowardin et al, 1979

evergreen stand	A plant community where evergreen trees or shrubs represent more than 50% of the total areal coverage of trees and shrubs. The canopy is never without foliage; however, individual trees or shrubs may shed their leaves (Mueller-Dombois and Ellenberg 1974).	Cowardin et al, 1979
extreme high water of spring tides	The highest tide occurring during a lunar month, usually near the new or full moon. This is equivalent to extreme higher high water of mixed semidiurnal tides.	Cowardin et al, 1979
extreme low water of spring tides	The lowest tide occurring during a lunar month, usually near the new or full moon. This is equivalent to extreme lower low water of mixed semidiurnal tides.	Cowardin et al, 1979
facultative wetland (FACW) plant	Plant that usually occur in wetlands (estimated probability 67% – 99%), but occasionally found in nonwetlands.	
facultative (FAC) plant	Plant equally likely to occur in wetlands or nonwetlands (estimated probability 34% - 66%).	
facultative upland (FACU) plant	Plant that usually occur in nonwetlands (estimated probability 67% – 99%), but occasionally found in wetlands (estimated probability 1% - 33%).	
federally-funded	Financial support for the mapping project comes directly or indirectly from one or more federal agencies.	FGDC Wetlands Subcommittee. 2009.
final map product	The final map product directed by this Standard is the incorporation of the interpreted and mapped wetlands within a project area into the Fish and Wildlife Service Wetland Database. Additional final map products may be required by the funding federal agencies.	FGDC Wetlands Subcommittee. 2009.
flat	A level landform composed of unconsolidated sediments -- usually mud or sand. Flats may be irregularly shaped or elongate and continuous with the shore, whereas bars are generally elongate, parallel to the shore, and separated from the shore by water.	Cowardin et al, 1979
floating plant	A non-anchored plant that floats freely in the water or on the surface; e.g., water hyacinth (*Eichhornia crassipes*) or common duckweed (*Lemna minor*).	Cowardin et al, 1979

floating-leaved plant	A rooted, herbaceous hydrophyte with some leaves floating on the water surface; e.g., white water lily (Nymphaea odorata), floating-leaved pondweed (Potamogeton natans). Plants such as yellow water lily (Nuphar luteum) which sometimes have leaves raised above the surface are considered floating-leaved plants or emergents, depending on their growth habit at a particular site.	Cowardin et al, 1979
floodplain	A flat expanse of land bordering an old river. (see Reid and Wood 1976:72, 84).	Cowardin et al, 1979
fresh	Term applied to water with salinity less than 0.5ppt dissolved salts.	Cowardin et al, 1979
geodatabase	A geodatabase is a database designed to store, query, and manipulate geographic information and spatial data of low dimensionality. Vector data can be stored as point, line or polygon data types, and may have an associated spatial reference system. Geodatabases can also be used to serve data directly to web map server software.	Derived from: Wikipedia December 2010
gravel	A mixture composed primarily of rock fragments 2 mm (0.08 inch) to 7.6 cm (3 inches) in diameter. Usually contains much sand.	Cowardin et al, 1979
growing season	The frost-free period of the year (see U.S. Department of Interior, National Atlas 1970:110-111 for generalized regional delineation).	Cowardin et al, 1979
haline	Term used to indicate dominance of ocean salt.	Cowardin et al, 1979
herbaceous	With the characteristics of an herb; a plant with no persistent woody stem above ground.	Cowardin et al, 1979
histosols	Organic soils.	Cowardin et al, 1979
horizontal accuracy	Refers to a feature's spatial relationship to the base imagery.	FGDC Wetlands Subcommittee. 2009.
hydric soil	Soil that is wet long enough to periodically produce anaerobic conditions, thereby influencing the growth of plants.	Cowardin et al, 1979
hydrography	The science of the measurement, description, and mapping of the surface waters of the earth, with special reference to their use for navigation. Those parts of a map, collectively, that represent surface waters.	Dictionary.com
hydrophyte, hydrophytic	Any plant growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content.	Cowardin et al, 1979
hyperhaline	Term to characterize waters with salinity greater than 40ppt, due to ocean-derived salts.	Cowardin et al, 1979

hypersaline	Term to characterize waters with salinity greater than 40ppt, due to land-derived salts.	Cowardin et al, 1979
imagery	In the context of wetland mapping, imagery is a picture or digital representation of an area captured through remote sensing instruments (e.g., aerial cameras or other sensors) that yield information about the Earth; imagery includes aerial photographs and digital geospatial imagery for computer analyses, but does not include maps (cartographic products - e.g., topographic maps and planimetric maps).	FGDC Wetlands Subcommittee. 2009.
Lacustrine	The Lacustrine System includes wetlands and deepwater habitats with all of the following characteristics: (1) situated in a topographic depression or a dammed river channel; (2) lacking trees, shrubs, persistent emergents, emergent mosses or lichens with greater than 30° areal coverage; and (3) total area exceeds 8 ha (20 acres). Similar wetland and deepwater habitats totaling less than 8 ha are also included in the Lacustrine System if an active wave-formed or bedrock shoreline feature makes up all or part of the boundary, or if the water depth in the deepest part of the basin exceeds 2 m (6 .6 feet) at low water. Lacustrine waters may be tidal or nontidal, but ocean-derived salinity is always less than 0.5 0/oo	Cowardin et al, 1979
land use/land cover (LULC)	Land use is the human use of land, such as urban, pasture, or forests. Land cover is the physical material at the surface of the earth. Land covers include grass, asphalt, trees, bare ground, water, etc. There are two primary methods for capturing information on land cover: field survey and analysis of remotely sensed imagery.	Wikipedia December 2010
limnetic	Within the Lacustrine System, depth greater than 2 meters (deepwater). Extends outward from the Littoral boundary and includes all deep-water habitats within the Lacustrine System.	Cowardin et al, 1979
LiDAR	LIDAR (Light Detection And Ranging) is an optical remote sensing technology that measures properties of scattered light to find range and/or other information of a distant target. The prevalent method to determine distance to an object or surface is to use laser pulses. Like the similar radar technology, which uses radio waves, the range to an object is determined by measuring the time delay between transmission of a pulse and detection of the reflected signal.	Wikipedia December 2010

littoral	Within the Lacustrine System, depth less than 2 meters (shallow water/exposed). Extends from shoreward boundary to 2 meters (6.6 feet) below annual low water or to the maximum extent of nonpersistent emergents, if these grow at depths greater than 2 meters.	Cowardin et al, 1979
logical consistency	Logical consistency refers to the internal consistency of the data structure, and particularly applies to topological consistency.	FGDC Wetlands Subcommittee. 2009.
macrophytic algae	Algal plants large enough either as individuals or communities to be readily visible without the aid of optical magnification.	Cowardin et al, 1979
mean high water	The average height of the high water over 19 years.	Cowardin et al, 1979
mean higher high tide	The average height of the higher of two unequal daily high tides over 19 years.	Cowardin et al, 1979
mean low water	The average height of the low water over 19 years.	Cowardin et al, 1979
mean lower low water	The average height of the lower of two unequal daily low tides over 19 years.	Cowardin et al, 1979
mean tide level	A plane midway between mean high water and mean low water.	Cowardin et al, 1979
mesohaline	Term to characterize waters with salinity of 5 to 18ppt, due to ocean-derived salts.	Cowardin et al, 1979
mesophyte, mesophytic	Any plant growing where moisture and aeration conditions lie between extremes. (Plants typically found in habitats with average moisture conditions, not usually dry or wet.)	Cowardin et al, 1979
mesosaline	Term to characterize waters with salinity of 5 to 18ppt, due to land-derived salts.	Cowardin et al, 1979
metadata	Data about data. For wetland mapping, the metadata must conform to the most recent FGDC Content Standard for Digital Geospatial Metadata (CSDGM). The metadata must include a description of the data verification, quality control, and quality assurance steps performed to meet the accuracy requirements of the wetlands mapping standard.	Dictionary.com; and FGDC Wetlands Subcommittee. 2009.
mineral soil	Soil composed of predominantly mineral rather than organic materials.	Cowardin et al, 1979
mixohaline	Term to characterize water with salinity of 0.5 to 30ppt, due to ocean salts. The term is roughly equivalent to the term brackish.	Cowardin et al, 1979
mixosaline	Term to characterize waters with salinity of 0.5 to 30ppt, due to land-derived salts.	Cowardin et al, 1979

mud	Wet soft earth composed predominantly of clay and silt--fine mineral sediments less than 0.074 mm in diameter (Black 1968; Liu 1970).	Cowardin et al, 1979
National Hydrography Dataset (NHD)	The National Hydrography Dataset (NHD) is the surface water component of The National Map. The NHD is a digital vector dataset used by geographic information systems (GIS). It contains features such as lakes, ponds, streams, rivers, canals, dams and streamgages.	National Hydrography Dataset website. http://nhd.usgs.gov/
National Spatial Data Infrastructure (NSDI)	Executive Order 12906 calls for the establishment of the National Spatial Data Infrastructure defined as the technologies, policies, and people necessary to promote sharing of geospatial data throughout all levels of government, the private and non-profit sectors, and the academic community. The goal of this Infrastructure is to reduce duplication of effort among agencies, improve quality and reduce costs related to geographic information, to make geographic data more accessible to the public, to increase the benefits of using available data, and to establish key partnerships with states, counties, cities, tribal nations, academia and the private sector to increase data availability. Consistent means to share geographic data among all users could produce significant savings for data collection and use and enhance decision making.	FGDC Wetlands Subcommittee. 2009.
needle-leaved deciduous	Woody gymnosperms (trees or shrubs) with needle-shaped or scale-like leaves that are shed during the cold or dry season; e.g., bald cypress (*Tazodium distichum*).	Cowardin et al, 1979
needle-leaved evergreen	Woody gymnosperms with green, needle-shaped, or scale-like leaves that are retained by plants throughout the year; e.g., black spruce (*Picea mariana*).	Cowardin et al, 1979
non-federally funded	Financial support comes from state, local, or private funds with no contribution either directly or indirectly from Federal sources.	FGDC Wetlands Subcommittee. 2009.
nonpersistent emergents	Emergent hydrophytes whose leaves and stems break down at the end of the growing season so that most above-ground portions of the plants are easily transported by currents, waves, or ice. The breakdown may result from normal decay or the physical force of strong waves or ice. At certain seasons of the year there are no visible traces of the plants above the surface of the water; e.g., wild rice (Zizania aquatica), arrow arum (Peltandra virginica).	Cowardin et al, 1979

nonsoil	Sand and rocks found in beaches, rocky shores, streambeds, and other habitat; which may not have wetland plants or hydric soils.	
obligate (OBL) hydrophytes	Species that are found only in wetlands -- e.g., cattail (*Typha latifolia*) as opposed to ubiquitous species that grow either in wetland or on upland -- e.g., red maple (*Acer rubrum*).	Cowardin et al, 1979
oligohaline	Term to characterize water with salinity of 0.5 to 5.0ppt due to ocean-derived salts.	Cowardin et al, 1979
oligosaline	Term to characterize water with salinity of 0.5 to 5.0ppt due to land-derived salts.	Cowardin et al, 1979
omission errors	For wetland mapping, omission errors are wetlands that are not identified on the map. Wetlands may be omitted due to several factors that preclude their identification or delineation including scale and emulsion of imagery, mapping scale or base map scale, quality of imagery, environmental conditions when imagery was captured, and difficulty of identifying particular types of wetlands.	FGDC Wetlands Subcommittee. 2009.
organic soil	Soil composed of predominantly organic rather than mineral material. Equivalent to Histosol.	Cowardin et al, 1979
ortho	See digital ortho.	
Palustrine	The Palustrine System includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.5 o/00 . It also includes wetlands lacking such vegetation, but with all of the following four characteristics : (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2 m at low water; and (4) salinity due to ocean-derived salts less than 0.5 o/oo.	Cowardin et al, 1979
persistent emergent	Emergent hydrophytes that normally remain standing at least until the beginning of the next growing season; e.g., cattails (*Typha* spp.) or bulrushes (*Scirpus* spp.).	Cowardin et al, 1979
photic zone	The upper water layer down to the depth of effective light penetration where photosynthesis balances respiration. This level (the compensation level) usually occurs at the depth of 1% light penetration and forms the lower boundary of the zone of net metabolic production.	Cowardin et al, 1979

photogrammetry	The process of making surveys and maps through the use of photographs, esp. aerial photographs.	Dictionary.com
pioneer plants	Herbaceous annual and seedling perennial plants that colonize bare areas as a first stage in secondary succession.	Cowardin et al, 1979
polygon	Traditionally a plane figure that is bounded by a closed path or circuit, composed of a finite sequence of straight line segments (i.e., by a closed polygonal chain). These segments are called its edges or sides, and the points where two edges meet are the polygon's vertices or corners.	Wikipedia December 2010
polyhaline	Term to characterize water with salinity of 18 to 30ppt, due to ocean salts.	Cowardin et al, 1979
polysaline	Term to characterize water with salinity of 18 to 30ppt, due to land-derived salts.	Cowardin et al, 1979
Producer's Accuracy (PA)	Measures the percentage of features that are correctly classified on the imagery. PA is measured by both feature and attribute accuracy. Feature accuracy is the correctness of the identification of wetland vs. non-wetland. Attribute accuracy is the correctness of the classification of the wetlands using the FGDC Wetlands Classification Standard.	FGDC Wetlands Subcommittee. 2009.
project area	A geographic area where wetland mapping is to be performed through some form of remote sensing (e.g., photointerpretation, satellite or other image processing). It may range in size from a region, state, county, or municipality or to portion thereof. For purposes of this Standard, a project area is not a site-specific area where construction, restoration, or similar actions are proposed or where on-the-ground wetland delineations are performed. It would be best for project areas to be indexed and organized by USGS topographic quadrangles or DOQQs.	FGDC Wetlands Subcommittee. 2009.
projection	Albers Equal-Area projection, or Albers projection (named after Heinrich C. Albers), is a conic, equal area map projection that uses two standard parallels. Although scale and shape are not preserved, distortion is minimal between the standard parallels. The Albers projection is the standard projection used by the United States Geological Survey and the United States Census Bureau.	Wikipedia December 2010

Riverine	The Riverine System includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean derived salts in excess of 0 .5 o/00. A channel is "an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water" (Langbein and Iseri 1960:5).	Cowardin et al, 1979
Root Mean Square Error (RMSE)	Root Mean Square Error (RMSE) is used to estimate positional accuracy. RMSE is the square root of the average of the set of squared differences between dataset coordinate values and coordinate values from an independent source of higher accuracy for identical points.	FGDC Geospatial Positioning Accuracy Standards Part 3: National Standard for Spatial Data Accuracy, FGDC-STD-007.3-1998
saline	General term for waters containing various dissolved salts. We restrict the term to inland waters where the ratios of the salts often vary; the term haline is applied to coastal waters where the salts are roughly in the same proportion as found in undiluted sea water.	Cowardin et al, 1979
sand	Composed predominantly of coarse-grained mineral sediments with diameters larger than 0.074 mm (Black 1968) and smaller than 2 mm (Liu 1970; Weber 1973).	Cowardin et al, 1979
shrub	A woody plant which at maturity is usually less than 6 m (20 feet) tall and generally exhibits several erect, spreading, or prostrate stems and has a bushy appearance; e.g., speckled alder (*Alnus rugosa*) or buttonbush (*Cephalanthus occidentalis*).	Cowardin et al, 1979
soil	(i)The unconsolidated mineral or organic material on the immediate surface of the Earth that serves as a natural medium for the growth of land plants. (ii) The unconsolidated mineral or organic matter on the surface of the Earth that has been subjected to and shows effects of genetic and environmental factors of: climate (including water and temperature effects), and macro- and microorganisms, conditioned by relief, acting on parent material over a period of time. A product-soil differs from the material from which it is derived in many physical, chemical, biological, and morphological properties and characteristics. A hydric soil is a soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part.	Soil Science Glossary (Soil Science Society of America); NRCS website December 2010

sound	A body of water that is usually broad, elongate, and parallel to the shore between the mainland and one or more islands.	Cowardin et al, 1979
source imagery	Source Imagery is the imagery used to identify and interpret the wetland and deepwater habitat features.	FGDC Wetlands Subcommittee. 2009.
spatial resolution	The detail with which a map depicts the location and shape of geographic features. The larger the map scale, the higher the possible resolution. As scale decreases, resolution diminishes and feature boundaries shall be smoothed, simplified, or not shown at all.	FGDC Wetlands Subcommittee. 2009.
spring tide	The highest high and lowest low tides during the lunar month.	Cowardin et al, 1979
State Wildlife Action Plan	Wildlife Conservation and Restoration Program and the State Wildlife Grants Program 2000. As a requirement of these programs, Congress asked each state wildlife agency to develop a “comprehensive wildlife conservation strategy”—a wildlife action plan—that evaluates wildlife conservation needs and outlines the necessary action steps.	State Wildlife Action Plans; Working together to prevent wildlife from becoming endangered.
stone	Rock fragments larger than 25.4 cm (10 inches) but less than 60.4 cm (24 inches).	Cowardin et al, 1979
submergent plant	A vascular or nonvascular hydrophyte, either rooted or nonrooted, which lies entirely beneath the water surface, except for flowering parts in some species; e.g., wild celery (*Vallisneria americana*) or the stoneworts (*Chara* spp.).	Cowardin et al, 1979
Target Mapping Unit (TMU)	An estimate of the size class of the smallest wetland that can be consistently mapped and classified at a particular scale of imagery, and that the image-interpreter attempts to map consistently. TMU allows for mapping below a specified threshold, but does not subject that finer detailed mapping to the accuracy requirements of the Standard.	FGDC Wetlands Subcommittee. 2009.
terrigenous	Derived from or originating on the land (usually referring to sediments) as opposed to material or sediments produced in the ocean (marine) or as a result of biologic activity (biogenous).	Cowardin et al, 1979

topographic maps	Cartographic representation of the Earth's surface at a level of detail or scale intermediate between that of a plan (small area) and a chorographic (large regional) map. Within the limits of scale, it shows as accurately as possible the location and shape of both natural and man-made features. Natural features include relief, which is sometimes mistakenly understood to be the sole feature characterizing a topographic map, and hydrographic features, such as lakes and rivers; man-made features include other characteristics of the subject area, such as cities, towns, and villages, and roads, railroads, canals, dams, bridges, tunnels, parks, and other features. Also known as topo maps.	Encyclopedia Britannica, 2008. Encyclopedia Britannica Online.
topology	Topology explicitly defines spatial relationships between features in geographic data. Specifically to our dataset: wetland polygons must not overlap.	http://webhelp.esri.com/ARCGISDESKTOP/9.3/index.cfm?TopicName=coverage_topology
tree	A woody plant which at maturity is usually 6 m (20 feet) or more in height and generally has a single trunk, unbranched for 1 m or more above the ground, and a more or less definite crown; e.g., red maple (Acer rubrum), northern white cedar (Thuja occidentalis).	Cowardin et al, 1979
upland	"Upland" is the default classification for regions of the map that are not classified as wetlands or other aquatic habitats. As such, the designation "Upland" represents generalized terrestrial areas which have not been further subdivided or categorized by type. While "Upland" primarily includes terrestrial (non-wetland) areas and former wetlands that are effectively drained or filled, it may include unclassified wetlands such as human-modified areas (e.g., farmed wetlands), wetlands that are too small to be differentiated, wetlands that couldn't be detected on the type of imagery used (e.g., small wetlands under forest cover), and other unintentional wetland omissions (errors). According to the FWS Wetlands Classification System (Cowardin et al, 1979): The upland limit of wetland is designated as (1) the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic or xerophytic cover; (2) the boundary between soil that is predominantly hydric and soil that is predominantly nonhydric; or (3) in the case of wetlands without vegetation or soil, the boundary between land that is flooded or saturated at some time during the growing season each year and land that is not. Such areas are left unclassified when mapping wetlands.	FGDC Wetlands Subcommittee. 2009.

User's Accuracy (UA)	Measures the percentage of reference sites on the ground that are correctly classified on the map.	FGDC Wetlands Subcommittee. 2009.
vertical accuracy	The measure of the accuracy of the vertical measure of a reference point.	FGDC Wetlands Subcommittee. 2009.
water table	The upper surface of a zone of saturation. No water table exists where that surface is formed by an impermeable body (Langbein and Iseri 1960:21).	Cowardin et al, 1979
web mapping service (WMS)	Standard protocol for serving georeferenced map images over the Internet that are generated by a map server using data from a GIS database.	Open Geospatial Consortium 1999
wrack	seaweed or other vegetation cast on the shore	Dictionary.com
wetland classification	In support of maintaining an ecological perspective, wetlands are defined as below, based upon the FWS Wetlands Classification System (Cowardin et al., 1979). This definition is the national classification standard for wetland mapping, monitoring, and data reporting as recognized by the FGDC on December 17, 1996. Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes, (2) the substrate is predominantly undrained hydric soil, and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.	FGDC Wetlands Subcommittee. 2009.
wetlands inventory mapping	More detailed mapping and classification of wetlands beyond distinguishing wetland from non-wetland or between simple categories of forested and non-forested or vegetated and nonvegetated.	FGDC Wetlands Subcommittee. 2009.
woody plant	A seed plant (gymnosperm or angiosperm) that develops persistent, hard, fibrous tissues, basically xylem; e.g., trees and shrubs.	Cowardin et al, 1979
xerophyte, xerophytic	Any plant growing in a habitat in which an appreciable portion of the rooting medium dries to the wilting coefficient at frequent intervals. (Plants typically found in very dry habitats.)	Cowardin et al, 1979